

<p>88-239210/34 A23 D16          MITSUBISHI RAYON KK          12.01.87-JP-004653 (16.07.88) C081-67          Polyester resin compsn. used in film fibre prodn. - has poly-beta-hydroxybutyrate added to crystalline satd. polyester resin          C88-107225</p>	<p>MITR 12.01.87          *J6 3172-762-A</p>
<p>The compsn. is characterized in that poly-beta-hydroxybutyrate is added to crystalline satd. polyester resin.</p>	<p>A(3-C, 5-E1A2, 5-E2, 7-A3A) D(5-C)</p>
<p><u>USE/ADVANTAGE</u></p>	<p>The compsn. is useful for preparing film, fibre, heat resistant bottle, tube, opener-tray etc. Through incorporating poly-beta-hydroxybutyrate, the compsn. has high crystallization speed, that is pref. for preparing a prod. by fixing the shape or dimension through crystallizing the moulding after moulding with low temp. mould of plastic fabrication.</p>
<p><u>EXAMPLE</u></p> <p>[Prepn. of poly-beta-hydroxybutyrate]. A culture liquid contg. 0.3 g of Alcaligenes entrophus were put in one litre of culture liquid contg. glucose (30 g/l) ammonium nitrate (1 g/l) potassium secondary phosphate(5 g/l)</p>	<p>magnesium sulphate 0.5 g/l) calcium chloride (0.11 g/l) ferrous sulphate (0.012 g/l) sodium molybdate (0.0025 g/l) and sodium chloride (0.4 g/l) and cultivated for 48 hrs. in mini-jar-fermenter. Microorganism was isolated by centrifuge, washed with water and acetone, and then extracted by chloroform. The biomass was coagulated by adding n-hexane, and dried, so that 7.8g of poly-beta-hydroxybutyrate was obtd. It was optically active and had average mol. wt. of about 1,800,000.</p> <p>[Prepn. of resin compsn.] 'Dianite MA-521' (RTM: poly-ethylene terephthalate, intrinsic viscosity = 0.72) (100 pts. wt.) and poly-beta-hydroxybutyrate (1 pts. wt) were dried up at 110 deg. C taking 12 hrs. or more, and then melt mixed using extruder at cylinder temp. of 235 deg. C. (5ppW19-Dwg No0/0).</p>